

## Connor Creek Watershed Master Plan

Overland Park, Kansas

The Connor Creek Watershed is located in a developing area of Overland Park, Kansas. The City of Overland Park desired a Watershed Master Plan to identify existing flooding and erosion problems, develop solutions to existing hazards, and implement planning and decision-making tools for evaluating future development.



Intuition & Logic provided a geomorphic analysis of more than 12 miles of open channel, including Connor Creek and a number of its tributaries. The geomorphic analysis included an in-depth background data review, integrating aerial photograph interpretation, evaluation of soil and geologic conditions, determination of meander geometry (planform analysis), and estimates of longitudinal profiles. The field investigation employed a GIS-based

rapid assessment protocol to determine the dominant fluvial processes and the likely progression of these major processes throughout the watershed.

The geomorphic analysis enabled us to identify and catalog existing problems in the watershed, and develop a Capital Improvements Program (CIP) for the City. Since the Connor Creek Watershed is still relatively undeveloped, interventions or improvements relied on non-structural approaches to stormwater management wherever appropriate, including riparian buffer zones, stormwater detention, bridge or culvert modifications, and soil bioengineering. Each proposed improvement outlined in the CIP included a description of the type of improvement, location in the watershed, the underlying problem to be addressed, design flows, estimated construction quantities and cost, and a schedule of implementation.

